

Description

The digital multi-function measuring transformer of series VarioCheck AD-VC3B are freely programmable digital measuring transformer with two analogue outputs and up to 4 limiting value relays. Extensive standard equipment and additional options solve almost all imaginable tasks of a modern evaluation. The input of all characteristics is carried out via the configuration software „AD-Studio“. VarioCheck AD-VC3B fulfils all tasks of a universal and secure measuring value recording through integral function modules such as limiting value messages, freely adjustable hysteresis, selectable relay functions, time-delayed switching, automatic or manual simulation modus, free linearizing curves and a wide range of supply voltage.



Specific characteristics

- Bipolar voltage/current inputs
- Supply of 2-/3-wire transmitter
- Potentiometer input
- Current and voltage output, differently scalable and can be utilised simultaneously
- Zoom function, expanded scale, linearizing, inverse modus
- Monitoring of the measuring signal with up to 4 freely adjustable limiting values
- Non-volatile saving of all set parameter
- Pluggable and codable terminal strips
- Parameter configuration via optional PC setup program "AD-Studio"

Business data

Order number

AD-VC3B GVC-R0	without relay
AD-VC3B GVF-R2	two relays
AD-VC3B GVF-R4	four relays

Technical specifications

Input current

Measuring range	-20 ... + 20 mA
Accuracy	5 μ A
Input resistance	60 Ohm

Voltage input 10V

Measuring range	-10 ... + 10 V
Accuracy	2,5 mV
Input resistance	1 MOhm

Voltage input 1V

Measuring range	-1 ... + 1 V
Accuracy	250 μ V
Input resistance	> 1 MOhm

Potentiometer input

Connection method	3-wire system
Max. Resistance	100 Ohm ... 100 kOhm

Transmitter supply

Off-load voltage	24,5 V
Voltage at 20mA	19,5 V
Current limit	~ 25 mA

Output current

Max. output range	0 ... 20,4 mA
Accuracy	~ 20 μ A
Max. burden	500 Ohm
Residual ripple	20 μ Ass

Output voltage

Max. output range	0 ... 10,2 V
Accuracy	~ 10 mV
Min. burden	5 kOhm
Residual ripple	10 mVss

Resolution

Input	13 bit
Output	10 bit

Relay outputs A...D

Contacts GVF-R2 / GVF-R4	2 changeover contact / 4 changeover contact
Max. AC-breaking capacity	250 V AC, 2 A AC, 50Hz
Max. DC-breaking capacity	35 V DC, 2 A DC
Switching operations	
Mechanical	10 ⁷
AC: 230V / 2A, cos(phi)=1	6 * 10 ⁵
AC: 230V / 2A, cos(phi)=0,4	2 * 10 ⁵
DC: 24V / 1A	2 * 10 ⁵
DC: 24V / 1A	2 * 10 ⁵

Transmission behaviour

Linearity error	0,2 % of full scale
Rise time	100 ms (output auf 90 %)
Temperature influence	+/- 100 ppm/K of full scale

Supply

Supply voltage	20 ... 253 V DC / 50 ... 253 V AC
Max. power consumption	2,6 W / 5 VAC



Multifunction Transducer

AD-VC 3B

Technical specifications

Housing

Manner of fastening	DIN rail 35mm (EN 50022)
Type of protection	IP 20
Connector cross section	max. 2,5 mm ²
Weight	~ 200 g

Environmental conditions

Ambient temperature	-10 ... 60 °C
Storage and transport	-10 ... 70 °C (no bedewing)

EMC

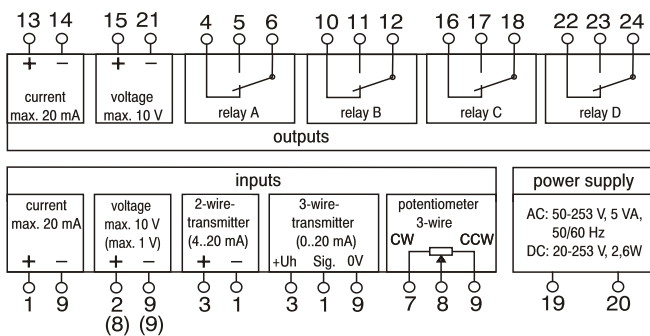
Product family standard	EN 61326
Discharge static electricity, ESD	IEC 61000-4-2
Electromagnetic fields ¹⁾	IEC 61000-4-3
Fast transients, burst	IEC 61000-4-4
Impulse voltage, surge	IEC 61000-4-5
Conducted HF-Signals ¹⁾	IEC 61000-4-6
Emitted interference	EN 55011, CISPR11 Cl. B

¹⁾During electromagnetic disturbance minor changes in output signal are possible.

Galvanic isolation, test voltages

Input/output	2,5 kV (1 min)
Signal/auxiliary voltage	4 kV (1 min)

Block and wiring diagram



Dimensions

